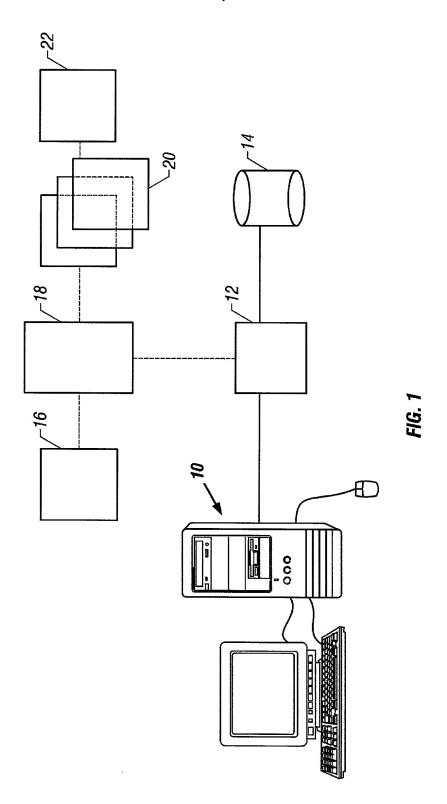Title: Grid That Tracks the Occurrence of a N-Dimensional Matrix of
Combinatorial Events in a Simulation Using A linear Index
Inventors: Boehm
Docket. No.: 31876.0263

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FIG. 1

Title: Grid That Tracks the Occurrence of a N-Dimensional Matrix of
Combinatorial Events in a Simulation Using A linear Index
Inventors. Boehm
Docket. No.: 31876.0263

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MONITOR DECLARATION ⟋50

↓

SIGNAL DECLARATION ⟋52

↓

BUS DECLARATION ⟋54

↓

LOGICAL EXPRESSIONS ⟋56

↓

END OF MONITOR ⟋58

FIG. 2

a1 b1	a1 b2	a1 b3
a2 b1	a2 b2	a2 b3
a3 b1	a3 b2	a3 b3

⟩90

FIG. 3

Title: Grid That Tracks the Occurrence of a N-Dimensional Matrix of
Combinatorial Events in a Simulation Using A linear Index
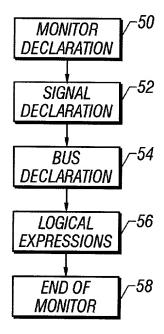Inventors: Boehm
Docket. No.: 31876.0263

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┌───┐ ⟋100
│   │
│   ┌──────────────────────┐ ⟋70   │
│   │ MONITOR DECLARATION │   │
│   └──────────────────────┘   │
│   │   │
│   ▼   │
│   ┌──────────────────────┐ ⟋72   ┌──────────────────────┐ ⟋84 │
│   │ AXIS DECLARATIONS   │----------│ FUNCTIONAL ATTRIBUTES │   │
│   └──────────────────────┘   └──────────────────────┘   │
│   │   ┊   │
│   ▼   ▼   │
│   ┌──────────────────────┐ ⟋74   ┌──────────────────────┐ ⟋85 │
│   │ SIGNAL DECLARATIONS │   │   OP CODES   │   │
│   └──────────────────────┘   └──────────────────────┘   │
│   │   ┊   │
│   ▼   ▼   │
│   ┌──────────────────────┐ ⟋76   ┌──────────────────────┐ ⟋86 │
│   │   BUS DECLARATIONS   │   │   CACHE STATES   │   │
│   └──────────────────────┘   └──────────────────────┘   │
│   │   ┊   │
│   ▼   ▼   │
│   ┌──────────────────────┐ ⟋78   ┌──────────────────────┐ ⟋87 │
│   │   LOGIC EXPRESSIONS │   │   BUS ACCESS STATES │   │
│   └──────────────────────┘   └──────────────────────┘   │
│   │   ┊   │
│   ▼   ▼   │
│   ┌──────────────────────┐ ⟋80   ┌──────────────────────┐ ⟋88 │
│   │   GRID DECLARATION   │   │   ACCESS SIZES   │   │
│   └──────────────────────┘   └──────────────────────┘   │
│   │   ┊   │
│   ▼   ▼   │
│   ┌──────────────────────┐ ⟋82   ┌──────────────────────┐ ⟋89 │
│   │   END MONITOR   │   │   ADDRESS STATES   │   │
│   │   DECLARATION   │   └──────────────────────┘   │
│   └──────────────────────┘   │
│   │
└───┘

                    ┌──────────────────────┐ ⟋91
                    │   MON PARSE   │
                    └──────────────────────┘
                               │
                               ▼
                    ┌──────────────────────┐ ⟋93
                    │   HIGHER-ORDER   │
                    │   LANGUAGE CODE   │
                    └──────────────────────┘
                               │
                               ▼
                    ┌──────────────────────┐ ⟋95
                    │   COMPILER   │
                    └──────────────────────┘
                               │
                               ▼
                    ┌──────────────────────┐ ⟋97
                    │   OBJECT FILE   │
                    └──────────────────────┘

FIG. 4

Title: Grid That Tracks the Occurrence of a N-Dimensional Matrix of
Combinatorial Events in a Simulation Using A linear Index
Inventors: Boehm
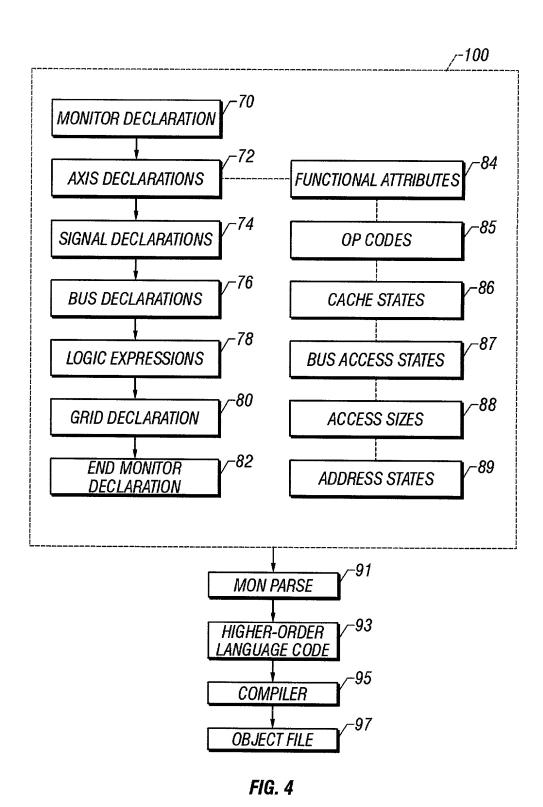Docket. No.: 31876.0263

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PLACE (n-1)		PLACE 3	PLACE 2	PLACE 1	PLACE 0
	...				

FIG. 5

PLACE 2	PLACE 1	PLACE 0
9's	3's	1's

FIG. 6A

	9's	3's	1's	
98	9's	3's	1's	
92	2	0	1	
94	18	0	1	96 → $\Sigma=19$

FIG. 6B